

What is claimed is:

1. A method of determining a pitch period, comprising:  
5 determining a first primary peak of an input signal; and  
determining a second primary peak of the input signal by  
locating a maximum peak from a series of peaks centered a  
period of time, equal to a prior pitch period, from the first  
primary peak.

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2. The method of claim 1 wherein the input signal is a  
quasi-periodic waveform.

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3. The method of claim 2 wherein the quasi-periodic  
signal is a speech waveform.

4. The method of claim 1 wherein the series of peaks  
comprises six peaks.

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5. The method of claim 1, further comprising:  
setting a buffer length.

6. The method of claim 5, further comprising:  
setting a vector length.

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7. The method of claim 5 wherein the buffer length  
comprises 20 sample points at 8 kHz in a speech signal.

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8. The method of claim 6 wherein the vector length  
comprises 120 sample points at 8 kHz in a speech signal.

9. The method of claim 1, further comprising:  
designating the second primary peak as a first primary  
peak of a second pitch period subsequent to the pitch period.

5 10. The method of claim 1 wherein the prior pitch period  
length is determined from taking a cepstrum of waveforms prior  
to the pitch period.

11. The method of claim 1, further comprising:  
10 generating a vector of each pitch period.

12. An article comprising a machine-readable medium that  
stores executable instructions for determining a pitch period,  
the instructions causing a machine to:

15 determine a first primary peak of an input signal; and  
determine a second primary peak of the input signal by  
locating a maximum peak from a series of peaks centered a  
period of time, equal to a prior pitch period, after the first  
primary peak.

20 13. The article of claim 12 wherein the input signal is  
a quasi-periodic waveform.

14. The article of claim 13 wherein the quasi-periodic  
25 signal is a speech waveform.

15. The article of claim 12 wherein the series of peaks  
comprises six peaks.

30 16. The article of claim 12, further comprising  
instructions causing the machine to:

set a buffer length.

17. The article of claim 16, further comprising instructions causing the machine to:

5 set a vector length.

18. The article of claim 16 wherein the buffer length comprises 20 sample points at 8 kHz in a speech signal.

10 19. The article of claim 17 wherein the vector length comprises 120 sample points at 8 kHz in a speech signal.

20. The article of claim 12, further comprising instructions causing the machine to:

15 designate the second primary peak as a first primary peak of a second pitch period subsequent to the pitch period.

21. The article of claim 17 wherein the prior pitch period is determined from taking a cepstrum of waveforms prior 20 to the pitch period.

22. The article of claim 12, further comprising instructions causing the machine to:

generate a vector of each pitch period.

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23. An apparatus comprising:

a memory that stores executable instructions for determining a pitch period; and

a processor that executes the instructions to:

30 determine a first primary peak of an input signal; and

determine a second primary peak of the input signal by locating a maximum peak from a series of peaks centered a period of time, equal to a prior pitch period, after the first primary peak.

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24. The apparatus of claim 23 wherein the input signal is a quasi-periodic waveform.

10 25. The apparatus of claim 24 wherein the quasi-periodic signal is a speech waveform.

26. The apparatus of claim 23 wherein the series of peaks comprises six peaks.

15 27. The apparatus of claim 23 wherein the processor executes the instructions to:

set a buffer length.

20 28. The apparatus of claim 27 wherein the processor executes the instructions to:

set a vector length.

29. The apparatus of claim 27 wherein the buffer length comprises 20 sample points at 8 kHz in a speech signal.

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30. The apparatus of claim 28 wherein the vector length comprises 120 sample points at 8 kHz in a speech signal.

30 31. The apparatus of claim 23 wherein the processor executes the instructions to:

designate the second primary peak as a first primary peak of a second pitch period subsequent to the pitch period.

32. The apparatus of claim 28 wherein the prior pitch  
5 period is determined from taking a cepstrum of waveforms prior to the pitch period.

33. The apparatus of claim 23 wherein the processor executes the instructions to:

10 generate a vector of each pitch period.